

## WHAT IS CLAIMED IS:

1           1.     An automatic speech recognition system, comprising:  
2           a speech recognition dictionary comprising a plurality of meaning tokens each  
3 associated with one or more pronunciations of one or more vocabulary words and  
4 signifying a single meaning; and  
5           a speech recognizer configured to convert spoken input into a sequence of  
6 meaning tokens contained in the speech recognition dictionary and corresponding to  
7 a sequence of vocabulary words most likely to have been spoken by a user.

1           2.     The system of claim 1, wherein each meaning token is characterized by  
2 a unique spelling.

1           3.     The system of claim 2, wherein the spelling of a meaning token  
2 facilitates extraction of meaning by a language analyzer.

1           4.     The system of claim 3, wherein the spelling of a meaning token  
2 encodes one or more labels identifying one or more respective application-specific  
3 categories.

1           5.     The system of claim 4, wherein an application-specific category  
2 identified by a label encoded in the spelling of a meaning token is an object category,  
3 a place category, an event category, or an action category.

1           6.     The system of claim 1, wherein multiple meaning tokens are associated  
2 with each of one or more polysemous vocabulary words contained in the speech  
3 recognition dictionary.

1           7.     The system of claim 1, further comprising a language analyzer  
2 configured to extract meaning from the sequence of meaning tokens provided by the  
3 speech recognizer based upon a set of task-specific semantic rules.

1           8.     The system of claim 7, wherein the language analyzer is a deterministic  
2 rule-based language analyzer.

1           9.     The system of claim 7, further comprising an application command  
2 translator configured to select an action from a set of application-specific actions  
3 based upon the meaning extracted by the language analyzer, and to issue one or  
4 more commands to carry out the selected action.

1           10.    The system of claim 1, wherein the speech recognition dictionary is a  
2 data structure stored in a computer-readable physical medium.

1           11.    An automatic speech recognition method, comprising:  
2     converting spoken input into a sequence of meaning tokens contained in a  
3 speech recognition dictionary and corresponding to a sequence of vocabulary words  
4 most likely to have been spoken by a user,  
5     wherein the speech recognition dictionary comprises a plurality of meaning  
6 tokens each associated with one or more pronunciations of one or more vocabulary  
7 words and signifying a single meaning.

1           12.    The method of claim 11, wherein each meaning token is characterized  
2 by a unique spelling.

1           13.    The method of claim 12, wherein the spelling of a meaning token  
2 facilitates extraction of meaning by a language analyzer.

1           14.    The method of claim 13, wherein the spelling of a meaning token  
2 encodes one or more labels identifying one or more respective application-specific  
3 categories.

1           15.    The method of claim 14, wherein an application-specific category  
2 identified by a label encoded in the spelling of a meaning token is an object category,  
3 a place category, an event category, or an action category.

1           16.    The method of claim 11, wherein multiple meaning tokens are  
2 associated with each of one or more polysemous vocabulary words contained in the  
3 speech recognition dictionary.

1           17.    The method of claim 11, further comprising extracting meaning from  
2   the sequence of meaning tokens based upon a set of task-specific semantic rules.

1           18.    The method of claim 17, further comprising selecting an action from a  
2   set of application-specific actions based upon the extracted meaning.

1           19.    The method of claim 18, further comprising issuing one or more  
2   commands to carry out the selected action.

1           20.    A computer program for automatically recognizing speech, the  
2   computer program residing on a computer-readable medium and comprising  
3   computer-readable instructions for causing a computer to:

4           convert spoken input into a sequence of meaning tokens contained in a  
5   speech recognition dictionary and corresponding to a sequence of vocabulary words  
6   most likely to have been spoken by a user,

7           wherein the speech recognition dictionary resides on the computer-readable  
8   medium and comprises a plurality of meaning tokens each associated with one or  
9   more pronunciations of one or more vocabulary words and signifying a single  
10   meaning.